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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,390	09/01/2006	Pieter Van Der Wolf	NL04 0206 US1	8116
65913	7550	01/07/2009	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2419	
			NOTIFICATION DATE	DELIVERY MODE
			01/07/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/591,390

Applicant(s)

VAN DER WOLF ET AL.

Examiner

Andrew C. Lee

Art Unit

2419

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date 9/01/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action in response to the Application no. 10591390 filed on 9/01/2006 is entered.

Claims 1 – 12 are hence entered and presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 9/01/2006 was filed and the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. The drawings are objected to because the rectangular/square boxes and the connection lines are not labeled properly with full text. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement

sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure is objected to because the abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text. Correction is required. See MPEP § 608.01(b).
6. The disclosure is objected to because of the following informalities: the layout for the specification is improper because of lacking typical arrangement of the specification. One with ordinary skill in the art will have difficult time to distinguish where is the starting and ending of title of the invention, background of the invention, brief summary of the invention, brief description of drawings and detailed description of the invention etc. See MPEP § 608.01(a).

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are recommended for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

7. Claims 1 – 12 are objected to because of the following informalities:

Regarding claim 1, a colon ":" should be inserted after the term "comprising" in line 1. Appropriate correction is required.

Regarding claim 11, a colon ":" should be inserted after the term "comprising" in line 1. Appropriate correction is required.

Regarding claim 12, a colon ":" should be inserted after the term "comprising" in line 2. Appropriate correction is required.

Regarding claim 12, the term "and/or" is a typo. Appropriate correction is required.

Regarding claim 2, the indefinite article "A" in the clause "A video stream processing circuit according to Claim 1" should be corrected as "The". Appropriate correction is required.

Regarding claims 3 – 10, claims 3 – 10 have the same deficiencies as stated in claim 2 above. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 recites the limitation "the processing circuitry" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the processing circuitry" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed subject matter "that particular item of frame data" is not clear. It is not clear what "that particular item" refers to. Clarification is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1 – 12 are rejected under 35 U.S.C. 102(e) as being anticipated by

Okada (US 6871001 B1).

Regarding claims 1, 11, 12, Okada discloses a video stream processing circuit (Fig. 1), and a method of video stream processing (Abstract, Fig. 1, col. 6, lines 24 – 38), comprising signal processing circuitry arranged to execute a first video stream processing function ("*MPEG decode core circuit*"; Fig. 1, col. 7, lines 60 – 66);

- a first and second buffer memory coupled to the signal processing circuitry, for buffering the frame data produced by the first video stream processing function, the first buffer memory being coupled to the signal processing circuitry via a shareable channel, the signal processing circuitry having access to the second buffer memory outside the shareable channel ("*first frame buffer*", and "*second frame buffer*"; Fig. 1, col. 6, lines 24 – 38) - wherein the first video stream processing function comprises writing frame data of successive video frames in a temporally ordered output sequence of frames into the first and/or second buffer memory (col. 6, lines 52 – 55, col. 8, lines 29 – 32);
- the signal processing circuitry being arranged to execute a second video stream processing function using the written frame data in a temporally ordered input sequence

of frames that differs from the output sequence, the second video stream processing function, the first video stream processing function being arranged to select to read the frame data of predetermined first and second ones of the frames selectively from the first and second buffer memory respectively (*col. 6, lines 56 – 59*), the second ones of the frames occurring in the same temporal order in both the input and output sequence, the first ones of the frames containing at least all particular frames whose position relative to the second ones of the frames in the output sequence differs from the position of the particular frames relative to the second ones of the frames in the input sequence (*col. 6, lines 59 – 67, col. 8, lines 63 – 67, col. 9, lines 1 – 12*).

Regarding claim 2, Okada discloses a video stream processing circuit claimed, comprising a first integrated circuit which comprises the signal processing circuitry and the second buffer memory and a second, separate integrated circuit that comprises the first buffer memory, the shareable channel forming part of a connection between the first and second integrated circuit (*Fig. 1, col. 7, lines 60 – 66*).

Regarding claim 3, Okada discloses a video stream processing circuit claimed wherein the second video stream processing function is arranged to last read each particular item of frame data from the second buffer memory at respective times, each before the first video stream processing function has written a full frame following that particular item of frame data (*col. 8, lines 56 – 61, col. 9, lines 4 – 12*).

Regarding claim 4, Okada discloses a video stream processing circuit claimed wherein the first video stream processing function includes an MPEG decoding function, the first ones of the frames including at least decoded MPEG P-frames, the MPEG

decoding function reading frame data from decoded MPEG I-frames and decoded MPEG P frames from the first buffer memory ("I-picture", "P-picture"; col. 13, lines 20 – 25).

Regarding claim 5, Okada discloses a video stream processing circuit claimed wherein the second ones of the frames include B frames ("B-picture"; col. 9, lines 25 – 29).

Regarding claim 6, Okada discloses a video stream processing circuit claimed wherein the first video stream processing function writes B frames to the second buffer memory only ("B-picture"; col. 9, lines 25 – 29).

Regarding claim 7, Okada discloses a video stream processing circuit claimed wherein the second ones of the frames include I frames, the first video stream processing function writing copies of the I frames to both the first and second buffer memory (col. 9, lines 20 – 25).

Regarding claim 8, Okada discloses a video stream processing circuit claimed wherein the second ones of the frames include B frames (*col. 9, lines 8 – 12*).

Regarding claim 9, Okada discloses a video stream processing circuit claimed wherein the first video stream processing function comprises an MPEG decoding function, the second video stream processing function reading at least decoded MPEG P-frames from the first buffer memory (*col. 9, lines 13 – 25*).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Yavits et al. (US 6690726 B1).
- b) Cheney et al. (5668599).
- c) Kato (US 6785464 B1).
- d) Nallur et al. (US 20030123849 A1).
- e) Itoh Et al. (US20060165387 A1).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<12/22/2008:2Qy09>

/Edan Orgad/

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Supervisory Patent Examiner, Art Unit 2419